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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/645,018

08/21/2003

Jae-Hyung Lee

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6218

7590

07/26/2004

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EXAMINER

WELLS, KENNETH B

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,018

Applicant(s)

LEE ET AL.

Examiner

Kenneth B. Wells

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/21/03
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-17 is/are rejected.
- 7) ☒ Claim(s) 7,8 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/21/03
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Art Unit: 2816

1. The disclosure is objected to because of the following informalities: on page 2, line 18, "on off" is grammatically incorrect. Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by either Rabinowitz et al or Fiscus.

In Rabinowitz et al, note Fig. 9 and column 14, lines 18-28, where the recited "delay locked loop" reads on TGDLL; the recited "control signal generator" reads on controller 942; and the "plurality of mode selection signals" read on the disclosed "timing signals" (see column 14, line 23) which are provided by the segment modulator 912 (which reads on the recited "mode selection signal generator" of claim 9). The mode selection signal 944, when output a first time, will read on the recited "first control signal", and when output a second time, will read

Art Unit: 2816

on the recited "second control signal". As to the memory recitation in the preambles of claims 1 and 9, note the abstract which discloses a computer program product, a type of semiconductor memory.

In Fiscus note Fig. 5, which illustrates the recited "delay locked loop"; the recited "control signal generator" reads on pre-divider 116 (it outputs a control signal to turn off the delay chain 105); and the "plurality of mode selection signals" read on the signals received by the pre-divider that cause the control signal output therefrom to turn on/off the delay chain 105. The control signal output from pre-divider 116, when output a first time, will read on the recited "first control signal", and when output a second time, will read on the recited "second control signal". The same is true of the input signal to pre-divider 116. As to the memory recitation in the preambles of claims 1 and 9, note column 4, line 57.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

Art Unit: 2816

art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-6 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabinowitz et al.

The claims reciting the plural control signals controlling whether a portion of the DLL is on or off, though not disclosed by Rabinowitz et al, would have been obvious to those having ordinary skill in the art who will easily recognize that any combination of control signals can be used to turn on or off the "memoryless elements" taught by the reference. The skilled artisan working in the art of DLL circuits is familiar with using a single control signal, or multiple control signals, for use in powering down separate elements of an integrated circuit. Thus, these limitations do not define patentably over Rabinowitz et al.

As to claim 13, this claim merely recites the well-known features of a DLL, and thus also fails to define patentably over Rabinowitz et al.

4. Claims 7, 8 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2816

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Note the teachings of Zhao, which discloses a PLL (similar to a DLL) having control signals which turn off the filter and pump of the PLL.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Wells whose telephone number is (571)272-1757. The examiner can normally be reached on Monday through Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan, can be reached at (571)272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

Application/Control Number: 10/645,018

Page 6

Art Unit: 2816

access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).



Kenneth B. Wells
Primary Examiner
Art Unit 2816

July 22, 2004